Statistics on land ownership patterns in Hawaii are frequently requested by administrators, legislators, and researchers. Notwithstanding the undeniable importance of such data, however, this type of information is frequently unavailable, usually not comparable, and not always well understood. This brief report has accordingly been compiled to acquaint data users with the types of data available on land ownership and to point out some of the major limitations of the figures.

The only comprehensive tabulations on land ownership, provided on an annual basis, are those compiled from real property tax records by the County finance departments, tabulated at the request of the Department of Business and Economic Development by the Honolulu Department of Finance, and published regularly in The State of Hawaii Data Book. Available for 1965, 1970, and annually from 1983 through 1987, these tallies present totals by islands for acreage owned by the Federal, State, and County governments and by private landowners. State land ceded by presidential proclamation or governor's executive order to the Federal government is usually (but not always) classified in this series as Federal land, even though title to it technically remains with the State. The area of public thoroughfares is excluded from the tabulations, which thus fall somewhat short of the official land area of the State (4,112,128 acres).

The most recent statistics from this source show a Statewide total of 3,930,000 acres, divided among Federal land (280,000 acres, or 7.1 percent of the total), State land (1,122,000 acres, 28.5 percent), the Counties (14,000 acres, 0.3 percent), and private holdings (2,515,000 acres, 64.0 percent). Trends since 1965 and island data for 1987 are presented in tables 1 and 2.

The U.S. Soil Conservation Service's 1982 National Resources Inventory classified all land on the eight major islands as either Federal or nonfederal. This breakdown, which was fully consistent with the official land area totals published by the Bureau of the Census, indicated a Federal Statewide acreage, 341,500, not much different from that published a year later by the State (328,400). The county detail from this source appears in table 3.

A third source is the annual tabulation issued by the U.S. General Services Administration in two volumes, Summary Report on Real Property Owned by the United States Throughout the World and Summary Report on Real Property Leased to the United States Throughout the World. First compiled by States in 1960, this series classifies Federal land by use but not by island or county. The most recent tabulation, dated September 30, 1986, reported 687,000 acres owned by the U.S. government in Hawaii and 9,400 acres leased to Federal agencies. The ownership total for unknown reasons was more than double the corresponding figure shown in other sources; the leased acreage, strangely, was less than one-fifth the total reported two years previously. Totals published by the GSA have gyrated wildly over the years, sometimes because of reclassification (in 1979, for example, 254,000 submerged acres in the Hawaiian Islands National Wildlife Refuge were added to the land area figure) and more than once because of large input errors, subsequently corrected. Trends since 1960 are reported in table 4.

Statistics on land owned or controlled by the armed forces have been collected and published at irregular intervals, most recently in response to a request by the Department of Business and Economic Development. This compilation, made as of April 1987, revealed that the Air Force, Army and Navy held more than 265,000 acres in Hawaii, including 26,400 acres owned in fee, 146,200 acres of ceded land, and 92,800 acres held under lease, license, or permit. The acreage owned in fee simple, according to this survey, is well under the total in military use reported by the GSA in table 4 (123,100), although it runs much higher when ceded land is included. The armed forces 1987 data, reported by branch of service and island in tables 5 through 8, are obviously the most authorative currently available on military lands.

Greater detail on State land holdings is given by a tabulation by the Department of Land and Natural Resources requested by DBED for the Data Book. This source, published annually since 1982, classifies State land by type of document and county. The 1988 tabulation, shown in table 9, reports total State acreage at more than 1,400,000, including 423,000 in public lands, 781,000 in lands set aside to other agencies (primarily Federal) by executive order or governor's proclamation, and 192,000 under the Department of Hawaiian Home Lands.

Current statistics on privately owned land are limited to the annual State and island totals cited earlier and a regular run-down on land possessed by six major owners. The latter series, available only for the State as a whole, has been compiled annually by the DBED since 1979, for publication in The State of Hawaii Data Book. (Earlier studies, encompassing much larger numbers of major owners, were made in 1956 by the Economic Planning and Coordination Authority, in 1964 by the Legislative Reference Bureau, and in 1968 by the Department of Land and Natural Resources.) According to the most recent DBED survey, the six largest private owners in 1986 held title to 938,000 acres, 23.9 percent of the area of Hawaii and 38.5 percent of all private land. The largest single owner was the Bishop Estate, with 341,000 acres, about the same area as Kauai (352,000). Recent findings from this survey appear in table 10.

Information on land tenure is quite limited. Real property taxation data indicate, for example, that owner occupied housing units in the State numbered 156,978 at the beginning of 1987, or 41.5 percent of the total housing stock. This total included 121,019 housing units on land owned in fee simple and 35,959 units on leased land (see DBED Statistical Report 204, "Housing Unit Estimates for Hawaii, 1970-1987"). However, there are no official figures on the acreage of leased land, either residential or nonresidential.

Historical data on land ownership are similarly sketchy. Such statistics as have become available are recapitulated in an earlier DPED study, "Land Use and Ownership Trends in Hawaii" (Statistical Report 98, December 28, 1973).

The most recent data are regularly included in The State of Hawaii Data Book, published annually by the Department of Business and Economic Development. The 1987 edition, dated November 1987, costs \$5 at the DBED Information Office and \$15 mailed postpaid out of State.

Table 1

LAND OWNERSHIP OR TENURE: 1965 TO 1987

[1,000 acres. Government land leased to private users is included with privately owned land]

Owned by government 2/

				Privately				
Year	All land 1/	Federal	State	Counti	les owned land			
1965	4,105.6	310.1	895.2	15.0	2,885.4			
1970	4,112.3	309.2	835.3	12.1	2,955.6			
1983	3,930.6	328.4	1,178.0	15.2	2,409.1			
1984	3,931.4	327.6	1,197.8	15.2	2,390.8			
1985	3,936.9	327.4	1,194.9	15.1	2,399.6			
1986	3,934.2	329.9	1,152.6	15.2	2,436.5			
1987	3,930.1	279.6	1,121.6	13.6	2,515.4			

- 1/ Because of the omission of public thoroughfares and for other reasons,
- totals differ considerably from official area estimates in other tables in this volume.
- 2/ State land ceded by presidential proclamation or governor's executive

order to the federal government appears in most cases to have been classified for this table as federal land, even though title to it technically remains with the state. Land ceded by the state to the counties, in contrast, has probably been classified as state land. For both types of ceded land, treatment may have varied from parcel to parcel.

Source: Real property tax records; tabulations in The State of Hawaii Data Book for 1970 (p. 38), 1971 (p. 55), 1983 (p. 192), 1984 (p. 225), 1985 (p. 190), 1986 (p. 200), and 1987 (p. 205).

Table 2

LAND OWNERSHIP OR TENURE, BY ISLANDS: FALL 1987

[In acres. Government land leased to private users is included with privately owned land]

Land owned by government 2/

Island	All	land 1	./	Federa	1		Stat		Privately Counties		ed land
State total Percent	3/	3,930, 100.0	143	279,55 7.		1,121	,632 28.5	1	0.3	2,	515,393 64.0
Hawaii Maui Kahoolawe Molokini		2,49 98,560 28,800 19	26,8 28,8		5 98, -	817	754,86 1,3 -		1,274	1, 271,56 -	569,612 2 -
Lanai		88,986		5		124		14		88,84	3

Molokai	16	9,566	133	47,1	135	246	122,052
Oahu	349,767	48,873	69,	554	10,128		221,212
Kauai	350,050	3,174	150,	881	590		195,406
Niihau	4	6,705		-	-	-	46,705
Lehua and Kaula		512	256	256	_		-

- 1/ Because of the omission of public thoroughfares and for other reasons,
- totals by island may differ considerably from official area estimates in other tables in this volume.
- 2/ State land ceded by presidential proclamation or governor's executive
- order to the federal government appears in most cases to have been classified for this table as federal land, even though title to it technically remains with the state. Land ceded by the state to the counties, in contrast, has probably been classified as state land. For both types of ceded land, treatment may have varied from parcel to parcel.
- 3/ Data exclude the Northwestern Hawaiian Islands (1,722 acres).
  Source: City and County of Honolulu, Department of Finance, Real Property
  Assessment Division, records. Tabulation by State Department of Business and
  Economic Development.

# Table 3 LAND OWNERSHIP, FEDERAL AND NONFEDERAL, AND TYPES OF WATER AREAS, BY COUNTIES: 1982

# [1,000 acres]

		Maui County	City &	
Sta	ate Ha	waii (incl.	County	of Kauai
Ownership total	1/ County	Kalawao)	Honolulu 1/	County
Total area	4,141.3	2,582.5 75	3.6	397.2 403.0
Federal land	341.5	231.9 5	5.9	51.1 2.6
Nonfederal land	3,770.6	2,349.9 69	5.1	330.6 394.0
Land	3,758.3	2,341.2 69	5.6	329.6 391.9
Small water bodies 2/	12.3	8.7	0.5	1.0 2.1
Census water 3/	29.2	0.7	5.6	15.5 6.4

- 1/ Excludes the Northwestern Hawaiian Islands, legally part of the City and County of Honolulu.
- 2/ Includes State totals of 2.2 in water bodies and 10.1 in perennial streams.
- 3/ Larger water bodies not included in land area totals as measured by the Bureau of the Census (Pearl Harbor, Kaneohe Bay, etc.).

Source: U.S. Department of Agriculture, Soil Conservation Service, 1982 National Resources Inventory, tables 1c, 2c, 7c, and 8c for Hawaii (unpublished).

Table 4 REAL PROPERTY OWNED BY OR LEASED TO THE FEDERAL GOVERNMENT: 1960 TO 1986

# [Acres]

				ned *******	***
	Date		Total	Military use	1/ Leased
1960:	June 30		234,074.1	(NA)	26,372.3
1965:	June 30		363,795.3	(NA)	44,058.4
1970:	June 30		396,900.7	175,223	3.9 48,593.9
1975:	June 30		405,529.8	155,573.1	48,123.0
1980:	Sept. 30	2/	693,381.8	128,122.4	51,250.9
1981:	Sept. 30		690,752.7	125,260.1	50,064.4
1982:	Sept. 30	3/	700,653.7	127,293.3	50,527.7
1983:	Sept. 30		691,053.6	116,160.6	51,852.3
1984:	Sept. 30	3/	683,716.2	(NA)	50,705.6
1985:	Sept. 30		711,699.7	123,792.6	9,624.5
1986:	Sept. 30		687,041.5	123,092.0	9,420.5

#### NA Not available.

- Including airfields.
- Beginning in 1979, annual reported data on land owned include lagoon water acreage in the Hawaiian Islands National Wildlife Refuge (initially about 254,000 acres).
- Revised from totals initially published by the Federal Government. Source: U.S. General Services Administration, Summary Report of Real Property Owned by the United States Throughout the World (annual) and Summary Report of Real Property Leased to the United States Throughout the World (annual), and corrected data subsequently obtained by DBED from GSA.

#### Table 5

# ACREAGE OWNED OR CONTROLLED BY THE U.S. DEPARTMENT OF DEFENSE, BY BRANCH OF SERVICE AND BY ISLANDS: APRIL 1987

Branch of service and is	Total land	Owned acreage	Ceded in fee	Other land 1/	land 2/
All branches		5,402 26,406		,187 92,80	
Branch of service: Air Force Army Navy and Marine Corps	. 1	2,496 L65,807 514 19,851	•	757 101,688 ,672 31,99	•
Island: Hawaii Maui Kahoolawe	108,928 28,777	4 8 -	84,819 5 28,777	24,105	3

Lanai		-	_	-	-
Molokai	6,319	_	12	6,307	
Oahu		93,888	26,397	30,546	36,945
Kauai		27,371	_	1,925	25,446
Niihau	3	_	_	3	
Kaula	108	_	108	-	
Northwestern Hawaiian					
Islands, exc. Midway		_	-	-	_

- 1/ Includes 4,962 acres of submerged Navy land in Pearl Harbor.
- 2/ Held under lease, license, or permit. Includes 31,283 acres of Navy land used for intermittent training with no permanent occupancy and subject to restrictions.

Source: Data submitted to the Hawaii State Department of Business and Economic Development by the armed forces, and cited in tables 6, 7, and 8.

Table 6

ACREAGE OWNED OR CONTROLLED BY THE U.S. AIR FORCE, BY ISLANDS: APRIL 1987

	Total	70	wned	Ced	ed	Other
Island	acreage		in fe	е	land	
land 1/						
State total	6,080.82	2,496	5.29 2,	827.22	757.31	
Hawaii		_	_	_	_	
Maui	3.26	_	_	3.26		
Kahoolawe	_	_	_	_		
Lanai	-	-	-	-		
Molokai	-	-	-	-		
Oahu	6,065.30 2,49	96.29	2,827.22	741.79		
Kauai	12.20	5	-	-	12.26	
Niihau		_	-	-	-	
Kaula .		_	-	-	-	
Northwestern Hawai:	ian					
Islands, exc. Mic	dway -		-	-	_	

1/ Held under lease, license, or permit.

Source: Headquarters, 15th Air Base Wing (PACAF), August 25, 1987.

Table 7

ACREAGE OWNED OR CONTROLLED BY THE U.S. ARMY, BY ISLANDS: APRIL 1987

Island	Total Ov acreaç	wned ge in fee	Ceded land	Other land 1/
State total	165,806.74	4,058.03	101,687.81	60,060.90
Hawaii	108,937	.66	4.20 84,	818.79 24,104.67
Maui	4.77	4.59	_	18
Kahoolawe	-	-	_	_
Lanai	_	-	-	_
Molokai		_	-	
Oahu	56,874.31	4,049.24	16,869.02	35,956.05
Kauai	_	_	-	_
Niihau		_	-	
Kaula	_	_	_	_
Northwestern Hawaiia	an			
Islands, exc. Midv	vay -	_	-	-

1/ Held under lease, license, or permit.
Source: Headquarters, U.S. Army Support Command, Hawaii, April 28, 1987.

# Table 8

# ACREAGE OWNED OR CONTROLLED BY THE U.S. NAVY AND MARINE CORPS, BY ISLANDS: APRIL 1987

Island	Total acrea	Owned ge in	fee ]	Ceded and 2/	Other land 1/
State total	93,514.2	5 19,8	51.39 41,	671.71	31,991.15
Hawaii		_	_	-	_
Maui	-	_	-	-	-
Kahoolawe	28,776.70	_	28,776.70	)	_
Lanai	-	_	-	-	-
Molokai	6,319	.01	_	12.01	6,307.00
Oahu	30,948.76 19	,851.39	10,849.91	247.	46
Kauai	27,358.85	_	1,925.09	25,	433.76
Niihau	2	.93	_	_	2.93
Kaula	108.00	_	108.00	)	_
Northwestern Hawa	niian				
Islands, exc. N	Midway -		_	-	_

Table 9

STATE PUBLIC AND SET-ASIDE LAND INVENTORY, BY COUNTIES: MARCH 10, 1988

[In thousands of acres]

City and State County of County of County of								
Type of document	t to	otal	Honolulu	На	waii	Kauai	. 1	Maui
All types	,414.7	67.9	980.1	1	55.4	211.4		
Public lands		422.8	15.3	326.9	38.	2	42.5	
General lease 1/		226.5	4.7	186.6	23.2	11.9		
Revocable permit 2/		111.2	2.8	73.9	12.0	22.5		
Unencumbered lands 3	3/	85.1	7.7	66.4	2.9	8.1		
Lands set aside to oth	ner							
government agencies		780.8	42.3	536.4	96.5	105.6		
Executive order	258.3	13.1	196.1	23.9	25.2			
Governor's proclamat	ion	522.5	29.2	340.3	72.7	80.4		
Dept. of Hawaiian Home	2							
Lands	191.9	4.9	107.8	19.0	60.2			
University of Hawaii		1.8	0.7	0.5	0.4	0.1		
Hawaii Housing Authori	ty	1.5	1.2	0.1	0.0	0.1		
Highways and roads		15.9	3.5	8.2	1.2	2.9		

<sup>1/</sup> Long-term leases. Mostly agricultural and pasture land. Includes land covered by water licenses not set aside to other government agencies.

<sup>2/</sup> Month-to-month leases. Mostly agricultural and pasture land. Includes land licenses.

<sup>3/</sup> Parcels with no documents and not in use.

Source: Hawaii State Department of Land and Natural Resources, Land Management Division, records.

Table 10

LAND IN HAWAII OWNED BY LARGE AND SMALL LANDOWNERS: 1985, 1986, AND 1987

Ownership	1985	1986 1/	1987
Land area of State (acres) 2/ Owned by government 2/ Owned privately 2/ Six large owners 3/ Bernice P. Bishop Estate 4/ Richard S. Smart	1,537,327 2,399,551 941,850	1,497,713 2,436,452 938,362	1,414,750 2,515,393 935,560
(Parker Ranch) 5/	139,301	139,301	139,301
Castle and Cooke, Inc. 6/	149,7	00 149,	400
148,580			
C. Brewer and Company, Ltd.	6/ 95,800	92,	591
91,501 Samuel M. Damon Estate 6/	121 650	121,599	121,599
Alexander and Baldwin, Inc.			
94,125	31,700	7 - 7	700
All others	1,457,701	1,498,090	1,579,833
Percent of total land area	100.0	100.0	100.0
Owned by government	39.0	38.1	36.0
	61.0	61.9	64.0
Six large owners	23.9	23.9	23.8
All others	37.0	38.1	40.2
Percent of privately owned land	100.0	100.0	100.0
Six large owners	39.3	38.5	37.2
All others	60.7	61.5	62.8

- 1/ Revised from Data Book 1987, table 203.
- $\,$  2/  $\,$  As of Spring 1985, Summer 1986 and Fall 1987. Because of the omission

of public thoroughfares and for other reasons, the State total may vary from year to year and also may differ from official area estimates in other tables of this volume.

- 3/ Some of these figures are not exact accountings but are the landowners' best estimates.
  - 4/ As of June 30.
- 5/ As of December 31. The total size of the Parker Ranch, including leased land, was 225,000 acres during this period.
  - 6/ As of December 31.

Source: State total, government total, and private total from The State of Hawaii Data Book 1987, table 201; six large owners from DBED survey of those owners; all other owners calculated as a residual.